

Listing of Claims:

1. (Original): A charge transfer element, comprising:
a reverse conductive type semiconductor region formed in one major surface of one conductive type semiconductor substrate;
a channel region of the one conductive type formed in the semiconductor region so as to extend in one direction;
a plurality of transfer electrodes formed on the semiconductor substrate so as to intersect the channel region;
a capacitance formed continuous from the channel region in the semiconductor region; and
an output transistor having a source and a drain both formed in the semiconductor region, and a gate connected to the capacitance,
wherein
the semiconductor region where the output transistor is formed exhibits an dopant density profile in a depth direction of the semiconductor substrate, which has a maximum dopant density value relative to a middle region of the semiconductor region.
2. (Original): The charge transfer element according to claim 1, wherein dopant density of the semiconductor region where the output transistor is formed is lower in a surface region rather than in the middle region along the depth direction of the semiconductor substrate.
3. (Original): The charge transfer element according to claim 1, further comprising:
a load transistor serially connected to the output transistor, and

wherein

the load transistor is formed in the semiconductor region where the output transistor is formed.

4. (Original): The charge transfer element according to claim 2, further comprising:

a load transistor serially connected to the output transistor, and

wherein

the load transistor is formed in the semiconductor region where the output transistor is formed.